

varietal forms than those mentioned above are true "temperature" forms—*i. e.* that they can be produced *regularly in all members of any brood by the influence and within the limits of certain temperatures* acting on all stages, or at least up to the end of the larval stages, when already the direction of the ensuing pupal developments is, *in the case of these forms*, predetermined so far as to resist conversion by opposite influences acting on the pupal stage.

Thus the temperature limits within which *V. urticæ* var. *falcoides* (*V. io* var. *mesoides*) and *V. urticæ* var. *amploides* (*V. io* var. *teloides*) are reared exclusive one of the other (but not exclusive of other forms of variation, the details of which associate with either the falcoid or amploid characters) can be given at 6–15° C. and 20–40° C. respectively. The most generalized form of expression would read: not above 15° C. = var. *falcoides*, and not below 20° C. = var. *amploides*.

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## TWO NEW SPECIES OF TRICHOGRAMMATIDÆ FROM THE UNITED STATES AND WEST AUSTRALIA.

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ONE of the following two species extends the known limits of the genus *Ufens*, Girault, recently described from the United States, to West Australia.

### Genus ABBELLA, Girault.

#### 1. *Abbella nympha*, sp. n. (normal position).

*Female*.—Length, 0.65 mm. Moderate in size for the genus.

The same as the type species of the genus (*subflava*, Girault), but differing from it as follows: More intensely yellow, not light greenish yellow; substigmal spot of fore wing obscure, only a faint cloud being present under and against the stigmal vein; antennæ differing in that the first funicle joint is slightly longer than wide, the second joint globular, as long as wide, both joints not distinctly wider than long, as in *subflava*; fore wings differing in having longer marginal cilia, in being smaller and shorter, in bearing an oblique line of discal cilia running back from the stigmal vein, the line moderately short and slightly curved, consisting of four or five cilia; also in having finer and denser discal ciliation.

With the general appearance of *Westwoodella americana* (Ashmead), Girault. General colour pale cadmium yellow, the colour uniform; antennæ concolorous, the legs pallid dusky yellowish, with the distal tarsal joint dusky; eyes and ocelli bright red; fore wings slightly fumated along their proximal halves, otherwise hyaline; venation concolorous with the legs. Abdomen having at least two

dorsal transverse black bands across the distal half, both apparently encircling its respective segment; also at least a black spot on each of the proximal segments, one on each side. Proximal and distal joints of the antennal club dusky. Otherwise, body practically immaculate.

Fore wings with about sixteen lines of discal cilia across their widest portion, the ciliation mostly in regular lines; the wing comparatively small and narrow, yet pyriform in shape, the blade regularly rounded distad, and with the marginal cilia moderately long, somewhat over a third the greatest wing width. Posterior wings with a paired distinct line of discal cilia along the cephalic wing margin, and a third line farther caudad, which is faint, and with its cilia separated more from one another in the line. Longest marginal cilia of posterior wing (caudal margin) slightly shorter than the longest cilia of the margins of the fore wing. Parapsidal furrows complete; abdomen conic-ovate, about as long as the head and thorax united, sessile, the ovipositor projecting slightly from its tip. Tarsal claws all moderate in length; tibial spurs single, straight, moderately short, absent on cephalic tibiae; strigils absent. (From one specimen,  $\frac{2}{3}$ -inch objective, 1-inch optic, Bausch and Lomb.)

*Male*.—Unknown.

Described from a single female specimen in balsam, received from Dr. L. O. Howard, and labelled: "Parasite on *Diplosis*? in stems of *Ambrosia artemisiæfolia*. Issued May 21, '97." Probably from Jassid eggs in *A. artemisiæfolia*, Linn.

*Habitat*.—United States (locality unknown).

*Type*.—Type, No. 13,793, United States National Museum, Washington, D.C.; a female in balsam.

### Genus *UFENS*, Girault.

#### 1. *Ufeus luna*, sp. n. (normal position).

*Female*.—Length, 0.60 mm. Exactly similar in general structure, appearance, and colour to the type species—*niger* (Ashmead)—but differing as follows: In the fore wings primarily: they have distinctly shorter marginal cilia, short in the type species, but here very short and close, hardly distinguishable from the edges of the wing; the discal ciliation is different, not so dense, the straight, distinct lines more numerous, consequently not peculiarly distinct as in *niger*; also the fore wing is fumated farther distad, and more distinctly, though not pronouncedly. In the legs: the posterior femora are more enlarged, ovate, and with a longitudinal lamellate sculpture. The posterior wings differ in being less pointed at tip, there the caudal margin bevelled off, curving convexly up to the tip of the straight cephalic margin; at this curve the marginal cilia abruptly shorten. Otherwise as in the type species, to which evidently it is closely allied. (From one specimen,  $\frac{2}{3}$ -inch objective, 1-inch optic, Bausch and Lomb.)

*Male*.—Unknown.